

MODULE 1 MARINE

	page
1.1 SHELLFISH TISSUE AND SEDIMENT ANALYSIS	
	1.2

PRINCIPAL INVESTIGATORS

Lee Doggett, DEP

TECHNICAL ASSISTANTS

Jim Stahlnecker

John Reynolds

Joseph Glowa

Ryan Burton

DRAFT

1.1 2006 Marine Sediment, Shellfish, and Lobster Tissue Analysis
(funded by DEP's oil research Surface Water Fund)

This draft report contains data on marine sediments, blue mussel (*Mytilus edulis*) tissue, and lobster (*Homerus americanus*) tissues collected in 2006. DEP is still waiting for some lobster tissue data from the contracted laboratory. Remaining lobster data will be reported as they are received and reviewed.

Mill Creek, Falmouth, was sampled for sediment in 2006. Three replicate samples were collected from Mill Creek, a tidal estuary within Casco Bay. Mill Creek was sampled to determine contaminant loading coming from extensive upland development in the area. Mill Creek was sampled on the following date:

Location	Date Sampled
Mill Creek, Falmouth	10/30/06

Sediment taken from Mill Creek, Falmouth was analyzed for: Mercury, heavy metals, PAHs, pesticides, and PCBs.

The following blue mussel sites were sampled in 2006: Spruce Creek, Kittery; Back Cove, Portland; Cocktail Cove, Great Diamond Island, Portland; Mill Creek, Falmouth; and Taunton Bay, Franklin. All samples consisted of three replicate samples. Sites were sampled on the following dates:

Location	Date Sampled
Spruce Creek, Kittery	11/02/06
Back Cove, Portland	11/29/06
Cocktail Cove, GDI, Portland	10/17/06
Mill Creek, Falmouth	10/12/06
Taunton Bay, Franklin	10/31/06

Mussel tissue from the five sites was analyzed for: Mercury, heavy metals, PAHs, pesticides, and PCBs.

Lobsters were collected as part of the National Coastal Assessment (NCA) on the southwestern half of the Maine coast in 2006. Nineteen stations were sampled over the western half of the Maine coast, and DEP dissected lobsters into hepatopancreas, muscle, and offal tissues. Whenever possible, lobster samples were composites of seven individual animals, though some samples contained fewer lobsters. EPA, as part of the NCA program, will analyze lobster muscle tissue for: Mercury, heavy metals, PAHs, pesticides, and PCBs. As part of the SWAT program, DEP analyzed the lobster muscle tissue for: Dioxins, furans, coplanar PCBs, and PBDEs. In addition, as part of the SWAT program, DEP analyzed lobster hepatopancreas for: Mercury, heavy metals, PAHs, pesticides, PCBs, dioxins/furans, coplanar PCBs, and PBDEs. Some lobster data have

been received from the contracted lab. Remaining lobster data will be presented upon their receipt, analysis, and review and are not contained in this draft report.

Raw data are contained in the accompanying files.

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